

**METHOD AND SYSTEM FOR NOISE MEASUREMENT IN AN  
IMPLANTABLE CARDIAC DEVICE**

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Abstract

An implantable cardiac rhythm management device is configured to estimating the noise level and noise floor in a sensing channel by measuring the magnitude of signal in the sensing channel when noise is determined to be present or absent, respectively. The presence or absence of noise may be determined by computing the  
10 density of local peaks or inflection points in an electrogram waveform. The computed local peak density is then used to set or clear a noise flag, which signifies whether noise is present or not. A noise statistic computed from samples of the electrogram signal obtained through a sensing channel may then be used to estimate a noise level or a noise floor.

"Express Mail" mailing label number: EV332568272US

Date of Deposit: August 19, 2003

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